

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of cleaving an insoluble fusion protein, ~~which is insoluble in a medium into which a Caulobacter secretes the fusion protein, into a first component which comprises a Caulobacter crescentus S-layer protein fragment incapable of adhesion to a Caulobacter crescentus cell surface but including a secretion signal, and a second component heterologous to Caulobacter, the fusion protein containing at least one aspartate-proline dipeptide at a site of cleavage, wherein the method comprises combining the fusion protein with an acid solution of a strength insufficient to solubilize the fusion protein for a time sufficient for cleavage of the fusion protein at said site of cleavage, and wherein the first component remains insoluble in said acid solution after cleavage.~~ at a cleavage site, the cleavage site having at least one aspartate-proline dipeptide, wherein the fusion protein comprises:

(a) a first component having a C. crescentus S-layer protein fragment of at least about 120 amino acids of the C-terminal and no more than about 405 amino acids of the C-terminal;
and

(b) a second component that is heterologous to C. crescentus;
the method comprising combining the fusion protein with an acid solution of a strength insufficient to solubilize the fusion protein for a time sufficient for cleavage of the fusion protein at said cleavage site, and wherein the first component remains insoluble in said acid solution after cleavage.

2. (Previously Amended) The method of claim 1, wherein the second component becomes soluble in said acid solution after cleavage.

3. (Previously Amended) The method of claim 1, wherein the acid solution has a pH of from about 1.5 to about 2.5

4. (Previously Amended) The method of claim 1, wherein the acid solution has a pH of about 1.65 to about 2.35.

5. (Previously Amended) The method of claim 1, wherein the method is carried out at a temperature in the range of about 30°C to about 50°C.

6. (Previously Amended) The method of claim 1, wherein the method further comprises separating products cleaved from the fusion protein.

7-8. (Cancelled)